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| EXAMINER | |
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| RICHER, AARON M | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/552,635 | KING, TONY RICHARD | |
| | Examiner | Art Unit | |
| | AARON M. RICHER | 2628 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 October 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *20051007*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-3, 6-15, and 17 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for some methods of frame prediction, such as using previous user information, does not reasonably provide enablement for all methods of frame prediction. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. One skilled in the art would not be able to make and use any system and method for frame prediction using the disclosure, only those actually specified in the disclosure.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 1, line 2 recites a system "being capable of" frame prediction. It is unclear whether the system actually performs this frame prediction or not. Claim 16, lines 1-2 recite a similar limitation.

6. Claim 4 recites the limitation "the device" in line 1. There is insufficient antecedent basis for this limitation in the claim. Claim 14 recites a similar limitation in lines 1-2.

***Claim Rejections - 35 USC § 101***

7. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 1-17 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

9. Claim 1 recites a "computer based system". The specification, at p. 7, lines 3-9, recites that the invention is implemented in "a system called VXT". "VXT" is described as a software program that is run by mobile devices (p. 6, lines 5-6 of the specification), which means that the "computer based system" of claim 1 appears to be a program, per se. Such a program does not fit into any of the four statutory categories of invention. See MPEP 2106.01, which recites:

> Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory.
>
> Similarly, computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See

Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035. Accordingly, it is important to distinguish claims that define descriptive material per se from claims that define statutory inventions.

Since the claim is directed to a program, rather than a computer-readable medium with a program encoded thereon, it is functional descriptive material, and therefore non-statutory under 35 U.S.C. 101.

10. It is noted that claim 4 actually recites a device with device memory, but because it is unclear how this is connected to the "computer based system" of claim 1, this claim is also rejected under 35 USC 101. The same logic can be applied to claim 14.

11. Claim 17 is directed to a method that does not pass the machine-or-transformation test and are therefore non-statutory

Recently, the Court of Appeals for the Federal Circuit issued an opinion affirming a final decision by the Board of Patent Appeals and Interferences sustaining a rejection of claims because they were not directed to patent-eligible subject matter under 35 U.S.C. 101. See In re *Bilski,* 545 F.3d *943,* 88 USPQ2d 1385 (Fed. Cir. 2008). The court's opinion clarified the standards applicable in determining whether a claimed method constitutes a statutory "process" under 35 USC 101.

As clarified in Bilski, the test for a method claim is whether the claimed method is (1) tied to a particular machine or apparatus, or (2) transforms a particular article to a different state or thing. There are two corollaries to the machine-or-transformation test. First, a mere field-of-use limitation is generally insufficient to render an otherwise ineligible method claim patent eligible. This means the machine or transformation must impose meaningful limits on the method claim's scope to pass the test. Second, insignificant extra-solution activity will not transform an unpatentable principle into a

patentable process. This means reciting a specific machine or a particular transformation of a specific article in an insignificant step, such as data gathering or outputting, is not sufficient to pass the test. In the instant case, the step of predicting frames is not in any way tied to a computer, and could easily be performed by a human being analyzing data.

***Claim Rejections - 35 USC § 102***

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 1-3, 7, and 11-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Goldberg (U.S. Patent 5,963,203).

14. As to claim 1, Goldberg discloses a computer based system for selecting digital media frames, the system being capable of predicting the frames that are to be subject to a subsequent selection action (col. 15, line 49-col. 16, line 16; a number of frames, ex. 10 frames, that a user may want to use, are selected by a computer; these frames are then confirmed by a user for use in a subsequent operation such as effects creation as noted in col. 17, lines 17-36).

15. As to claim 2, Goldberg discloses a system in which the subsequent selection action is the selection of the predicted frames for inclusion to create a new clip (col. 17, lines 17-36; a new clip with special effects is created).

16. As to claim 3, Goldberg discloses a system in which the subsequent selection action is the selection of the predicted frames for exclusion from a new clip (col. 16, lines 9-16; a user may subsequently de-select some of the predicted frames from being in the clip).

17. As to claim 7, Goldberg discloses a system that graphically represents frames and combines those graphically represented frames with a graphical indication of the prediction of which of those graphically represented frames are to be subject to the subsequent selection action (col. 16, lines 9-16; the frames are presented in a graphical interface so a user can de-select or choose not to de-select them; thus some sort of graphical indication of predicted selection must be shown).

18. As to claim 11, Goldberg discloses a system in which the system enables the user to select further actions to be performed on frames; the further actions being selected from the list: annotations; effects; transitions (col. 17, lines 17-36; effects are performed on the selected frames).

19. As to claim 12, Goldberg discloses a system in which the frames are video and/or audio frames (col. 15, line 49-col. 16, line 16; video frames are disclosed).

20. As to claim 13, Goldberg discloses a system that is integrated with a media player application such that system controls are displayed at the same time as controls for the media player application are displayed (col. 7, lines 32-52; a view of an image is displayed at the same time as an "interface player", with controls the display of a video sequence).

21. As to claim 14, Goldberg discloses a system wherein the device is selected from the following list: laptop computer, mobile PDA with wireless connectivity, mobile telephone, set-top box; hard-disc based personal video recorders (PVR) (col. 15, lines 21-29; the invention works on "a personal computer, or any other hardware"; a "personal computer" would clearly include a laptop computer).

22. As to claim 15, Goldberg discloses a system in which the frames, or a list of those frames, that have been subject to the subsequent selection action are exported (col. 18, lines 7-21; the frames that have been added to the interface are exported to a file).

23. As to claim 16, Goldberg discloses a system which is capable of predicting the frames that are to be subject to a subsequent selection action based on pattern classification applied to the frame content using fuzzy logic or neural nets or by applying pre-defined rules to meta-data stored with the frames or other kinds of data that can be extracted from the frames by suitable processing (col. 15, line 49-col. 16, line 16; pre-defined rules are applied to data extracted from the frames such as various activities determined to be going on in the frames).

24. As to claim 17, see the rejection to claim 1.

***Claim Rejections - 35 USC § 103***

25. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

26. Claim 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg in view of Uesaki (U.S. Publication 2003/0051256).

27. As to claim 4, Goldberg discloses a system with pre-defined rules (col. 15, line 49-col. 16, line 16), but does not disclose a system in which the device holds in device memory information that defines how a user has previously selected frames for inclusion or exclusion, the device using that information to predict how the user wishes to select frames for inclusion or exclusion in the future in a way that is consistent with previous behavior. Uesaki, however, discloses a video system that takes into account a user's preference history when selecting video frames for inclusion in a set of video frames to send to a user (p. 2-3; sections 0042-0046; p. 8, sections 0110 and 0111). The motivation for using a user's preference history in this manner is to allow a user flexibility from the usual frames that only use one point of view (p. 1, section 0007). It would have been obvious to one skilled in the art to modify Goldberg to predict a user's preference of frames to include or exclude based on history in order to allow flexibility and provide greater satisfaction to a user as taught by Uesaki.

28. As to claim 5, Uesaki discloses a system in which the information held in device memory that is used for frame prediction is updated whenever the user completes the subsequent selection action (p. 8-9, sections 0120-0126; a user can select preferences for each video when prompted; these preferences can then be applied to later videos meaning that preferences are updated).

29. As to claim 6, Uesaki discloses a system in which the information determines the number of frames that the system predicts will be subject to selection (p. 6, section

0093; the process is done every frame or every "several" frames; either way, the number of frames selected for a user must inherently be known or else the invention would not be able to re-sync the video after completion of the selected frames).

30. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg in view of Arman (U.S. Patent 5,521,841).

31. As to claim 8, Goldberg discloses a system with pre-defined rules (col. 15, line 49-col. 16, line 16), but does not disclose a system in which the system predicts the frames that are to be subject to the subsequent action after the user has selected an initial frame. Arman, however, discloses a user selecting an initial Rframe, and then a system going through all subsequent Rframes to find similar Rframes (col. 4, lines 5-20). This comprises a prediction of frames that a user wants to see. The motivation for this is to more efficiently manage a large number of frames, as opposed to forcing a user to fast-forward to desired frames (col. 1, lines 54-67). It would have been obvious to one skilled in the art to modify Goldberg to predict frames from an initial selected frame in order to efficiently seek out and manage frames in a large number of frames as taught by Arman.

32. As to claim 9, Arman discloses that the initial frame is the start of a clip (col. 4, lines 5-20; all other Rframes found are subsequent to the frame selected by a user in the image sequence).

33. As to claim 10, Arman does not expressly disclose a system in which the user can task or navigate through the options by repetitively selecting a button or menu option. Official notice has been taken of the fact that using buttons and menu options to

navigate options is well-known in the art (see MPEP 2144.03). It would have been obvious to one skilled in the art to modify Goldberg and Arman to use buttons and menus to select options in order to make a user interface more intuitive as is known in the art.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AARON M. RICHER whose telephone number is (571)272-7790. The examiner can normally be reached on weekdays from 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on (571) 272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aaron M Richer/
Examiner, Art Unit 2628
4/27/09